



STRUCTURAL INFORMATION REQUIRED ON ALL COMMERCIAL PLANS

1. Per VUSBC part 1 Construction Code section 109.3 Engineering Details and IBC 1603 Construction Documents, provide on the plans:

General

- a. Floor live load(s) including concentrated load(s)
- b. Roof live load(s)
- c. Roof dead load(s)
- d. Rain load including the d_s and d_h used for calculation per IBC 1611 when water accumulation is possible.

Roof snow load

- a. Flat roof snow load, P_f or sloped roof snow load P_s per slopes over degrees;
- b. Snow exposure factor, C_e ;
- c. Snow load importance factor, I_s ;
- d. Thermal factor, C_t ;
- e. Drift loads per 1608.7 (section 7.7 of ASCE 7) if applicable;

Wind load per IBC 1609

- a. Provide the basic wind speed,
- b. Use category and Importance factor,
- c. The exposure group,
- d. The applicable internal pressure coefficient,
- e. Effective wind loads/pressures for the main wind force resisting system and components and cladding (windward, leeward, uplift, component and cladding pressures),

Earthquake design data per IBC 1615

- a. Use category and Importance factor,
- b. Site class,
- c. Design spectral responses S_d s and S_d1 (calculated showing the S_s , $S1$, F_a and F_v used),
- d. The seismic design category,
- e. The analysis procedure used,
- f. Any structural irregularities listed,
- g. Calculations for C_s and W including the R and I_e used for calculation,
- h. The seismic base shear,

- i. The basic seismic force resisting system used per column 1 of table 1617.6.2.
- 2. Provide on the plans the component importance factors per ASCE 7-02 section 9.6.1.5. If architectural, mechanical, electrical, process equipment or life safety equipment must have bracing designed to withstand seismic forces per ASCE 7-02 section 9.6.1 then it must be so noted. If the component bracing plans are not to be included with the structural plans and will be designed by the architect and or the PME system designers then note such on the structural code notes and the general architectural notes. The other designers need to know what they are responsible for designing.
- 3. Wood frame construction: Per IBC 2305 note on the plans, which walls or portions of walls are to be used as shear walls and provide on the plans, the required nailing schedules and panel connection details.
- 4. Conventional light frame construction provisions. If the building is to be constructed in accordance with the conventional light frame construction provisions of section 2308 provide on the plans:
 - a. Floor and roof live loads,
 - b. Ground snow loads, P_g
 - c. Basic wind speed (3-second gust) in miles per hour and the wind exposure factor,
 - d. Seismic Design Category and Site Class.
 - e. Locations of braced wall lines per IBC 2308.3
 - f. Locations of braced wall panels per IBC 2308.9.3
 - g. The method of constructing the braced wall panels per 2308.9.3 (reference the method, 1-8, outlined in section 2308.9.3)